

**REMARKS**

After the foregoing amendment, claims 3-14 are pending in the application.

**Rejections Under 35 U.S.C. § 102(e)**

Claims 1, 2 and 4 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. patent number 6,314,284 issued to Patel et al. on November 6, 2001.

Claims 1 and 2 have been canceled. Claim 4 now depends from amended claim 3, which has been rewritten in independent form and has a limitation that recites, "wherein the wireless air interface element is adapted to employ at least two different types of wireless air interfaces selected from the group consisting of Advanced Mobile Phone Service (AMPS), Code Division Multiple Access (CDMA), Time Division Multiple Access (TDMA), Global System for Mobile Communications (GSM), 802.11 and Universal Mobile Telecommunications System (UMTS)", which is not taught by the Patel reference. The Office Action admits that Patel does not teach that "the wireless air interface comprises at least two different types of wireless air interfaces".

In view of the foregoing, applicants submit that Patel does not describe each and every element of claim 4, and therefore claim 4 is not anticipated by Patel.

**Rejections Under 35 U.S.C. § 103(a)**

Claims 3 and 5-13 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent number 6,314,284 issued to Patel et al. on November 6, 2001 in combinations with various other respective references.

**Rejections Under Patel and Akatsu**

Claim 3 was rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent number 6,314,284 issued to Patel et al. on November 6, 2001 in

view of U.S. patent number 6,523,064 issued to Akatsu et al. on February 18, 2003.

Applicants have rewritten claim 3 in independent form to include all limitations of the former base claim 1. In addition, claim 3 has been amended to recite the limitation, "wherein the wireless air interface element is adapted to employ at least two different types of wireless air interfaces selected from the group consisting of Advanced Mobile Phone Service (AMPS), Code Division Multiple Access (CDMA), Time Division Multiple Access (TDMA), Global System for Mobile Communications (GSM), 802.11 and Universal Mobile Telecommunications System (UMTS)".

As noted, the Office Action admits that the Patel reference does not teach claim 3's limitation that recites, "the wireless air interface comprises at least two different types of wireless air interfaces". Therefore, the Patel reference does not teach claim 3's amended limitation.

The Akatsu reference discloses a home gateway that is capable of receiving media feeds from multiple uni-directional interfaces, e.g., signals from a satellite via a satellite receiver, signals from a broadcast tower via a antenna, etc., as shown in FIG. 6. Thus, like Patel, Akatsu does not teach, "wherein the wireless air interface element is adapted to employ at least two different types of wireless air interfaces selected from the group consisting of Advanced Mobile Phone Service (AMPS), Code Division Multiple Access (CDMA), Time Division Multiple Access (TDMA), Global System for Mobile Communications (GSM), 802.11 and Universal Mobile Telecommunications System (UMTS)". Therefore the combination of Patel with Akatsu does not teach or suggest all of the limitations in applicants' claim 3, and therefore claim 3 is allowable over the proposed combination.

#### Rejections Under Patel and Siu

Claim 5 was rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent number 6,314,284 issued to Patel et al. on November 6, 2001 in view of U.S. patent number 6,522,641 issued to Siu et al. on February 18, 2003.

The Patel reference does not teach or suggest, "wherein the wireless air interface element is adapted to employ at least two different types of wireless air interfaces selected from the group consisting of Advanced Mobile Phone Service (AMPS), Code Division Multiple Access (CDMA), Time Division Multiple Access (TDMA), Global System for Mobile Communications (GSM), 802.11 and Universal Mobile Telecommunications System (UMTS)". The Siu reference does not cure the deficiency. Instead, Siu discloses a fixed wireless point-to-multipoint network in which base stations are connected via IP and/or ATM switches. Siu's base stations support TDMA and FDMA access, with TDMA being the only wireless air interface recited in applicants' claimed invention. Therefore, the combination of Patel and Siu does not teach or suggest all of the limitations in applicants' claim 5, and therefore claim 5 is allowable over the proposed combination.

#### Rejections Under Patel and Rodrig

Claims 6 and 7 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent number 6,314,284 issued to Patel et al. on November 6, 2001 in view of U.S. patent number 6,256,314 issued to Rodrig et al. on July 3, 2001.

The Patel reference does not teach or suggest, "wherein the wireless air interface element is adapted to employ at least two different types of wireless air interfaces selected from the group consisting of Advanced Mobile Phone Service (AMPS), Code Division Multiple Access (CDMA), Time Division Multiple Access (TDMA), Global System for Mobile Communications (GSM), 802.11 and Universal Mobile Telecommunications System (UMTS)" as recited in applicants' independent 3 for the above-mentioned reasons. The Rodrig reference does not cure the deficiency noted above for Patel. Instead, Rodrig discloses a method of layer 3 forwarding. Rodrig makes no mention of base stations or wireless air interfaces. Hence, applicants' novel wireless air interface element cannot be imputed to Rodrig. Accordingly, the combination of Patel and Rodrig does not

teach or suggest all of the limitations in applicants' claims 6 and 7, and therefore claims 6 and 7 are allowable over the proposed combination.

Rejections Under Doshi and Patel

Claims 8-12 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent number 6,529,499 B1 issued to Doshi et al. on March 4, 2003 in view of U.S. patent number 6,314,284 issued to Patel et al. on November 6, 2001.

Applicants respectfully traverse this rejection for two reasons.

First, applicants assert that even if it were proper to combine the cited references, the resulting combination would not anticipate or make obvious applicants' claims. This is because neither Doshi nor Patel teach applicants' claim 8 limitation that recites,

“at least one base station for communicating information between a wireless endpoint and an Internet Protocol (IP) based packet network, said at least one base station being operable to employ at least two different types of wireless air interfaces selected from the group consisting of Advanced Mobile Phone Service (AMPS), Code Division Multiple Access (CDMA), Time Division Multiple Access (TDMA), Global System for Mobile Communications (GSM), 802.11 and Universal Mobile Telecommunications System (UMTS)”.

More specifically, Doshi's box 250 in FIG. 1 is a signaling gateway, not a base station as asserted by the Examiner. Doshi's box 250 is used to facilitate conversions in signaling mechanisms between Public Switched Telephone Networks and IP networks, as stated in column 3, lines 21-24. As known by those skilled in the art, base stations, as used in applicants' claim 8, are utilized in wireless networks to wirelessly communicate signaling and information content, e.g., conversations, over an air interface, and couple the received signaling and information content to nodes in a wireless network. Since the

signaling gateway disclosed in Doshi does **not** receive information content over an air interface and communicate information between a wireless endpoint and an Internet Protocol (IP) based packet network, it cannot be considered a base station. Therefore, the combination of Doshi and Patel lacks the base station recited in applicants' claim 8.

Second, applicants submit that there is no motivation to combine Doshi with Patel, so the combination is improper. The Office Action suggests that there is a motivation to combine the Doshi reference and the Patel reference—namely, the use of Patel's wireless network in Doshi's network would provide transmission of information in free space. However, applicants respectfully submit that the teachings in Doshi and Patel provide no basis to conclude that a person of ordinary skill in the art would use Patel's technique to facilitate Doshi's arrangement to arrive at the subject matter of applicants' claim 8.

Each reference addresses a problem so different from the one addressed by the other reference that the respective teachings provide no motivation for the person of ordinary skill to combine them.

More specifically, Doshi addresses the problem of providing quality of service guarantees for voice services over IP networks. Doshi identifies the IP network path utilized for IP packet transmission between source and destination edge devices and virtually provisions IP network path bandwidth for priority voice traffic.

Rather than addressing problems that involve providing quality of service guarantees for voice services over IP networks as done by Doshi, it appears that the problem being addressed by Patel is the need to provide service transparency for mobile terminating calls to roaming H.323 mobile terminals in a cellular network. To this end, in Patel, a Mobile Station Integrated services Digital Network number is used within the Public Land Mobile Network and the H.323 system to route calls properly.

Accordingly, one of ordinary skill in the art would not be motivated to combine a solution that provides quality of service guarantees for voice services

over IP networks with such a different teaching of service transparency for mobile terminating calls to roaming H.323 mobile.

Furthermore, since the teachings of Doshi adequately address the problem of providing quality of service guarantees for voice services over IP networks, there is no motivation to combine with Patel's teachings. Given that Doshi's technique does not suffer from the problems that Patel addresses, one of ordinary skill in the art would not be led to try to improve Doshi's technique with Patel's teachings.

Thus, one of ordinary skill in the art would **not** be motivated to modify Doshi with Patel's teachings. Consequently, applicants respectfully submit that the Examiner is relying on the use of impermissible hindsight in an attempt to reconstruct applicants' teachings by combining Doshi with Patel. Accordingly, applicants submit that the combination and resultant rejection are improper.

In view of the foregoing, claim 8 is believed to be allowable over the proposed combination of Doshi and Patel. Since claims 9-12 ultimately depend from allowable claim 8, these claims are also allowable over the proposed combination.

#### Rejections Under Doshi, Patel and Siu

Claim 13 was rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent number 6,529,499 B1 issued to Doshi et al. on March 4, 2003 in view of U.S. patent number 6,314,284 issued to Patel et al. on November 6, 2001, and further in view of U.S. patent number 6,522,641 issued to Siu et al. on February 18, 2003.

The Doshi and Patel references do not teach or suggest, "at least one base station for communicating information between a wireless endpoint and an Internet Protocol (IP) based packet network, said at least one base station being operable to employ at least two different types of wireless air interfaces selected from the group consisting of Advanced Mobile Phone Service (AMPS), Code Division Multiple Access (CDMA), Time Division Multiple Access (TDMA), Global System for Mobile Communications (GSM), 802.11 and Universal Mobile

Telecommunications System (UMTS)” as recited in applicants’ independent claim 8 for the above-mentioned reasons. The Siu reference does not cure the deficiency noted above for Doshi and Patel. Instead, Siu discloses a fixed wireless point-to-multipoint network in which base stations are connected via IP and/or ATM switches. Siu’s base stations support TDMA and FDMA access, with TDMA being the only wireless air interface recited in applicants’ claimed invention. Since claim 13 ultimately depends from claim 8, this claim is also allowable. Accordingly, the combination of Doshi, Patel and Siu does not teach or suggest all of the limitations in applicants’ claim 13, and therefore claim 13 is allowable over the proposed combination.

#### New Claim

New claim 14 has been added. This claim includes limitations directed to the above-described distinguishing aspects of the invention and are submitted to be patentable for the reasons stated hereinabove. No new matter has been added.

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Conclusion

In view of the foregoing amendments and remarks, applicants submit that this application is in condition for allowance, and reconsideration is therefore respectfully requested. If there are any outstanding issues that the Examiner feels may be resolved by way of a telephone conference, the Examiner is invited to contact the undersigned to resolve the issues.

Respectfully submitted,

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